IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Andrew D. Birrell et al.

Application No. To Be Assigned

Group Art Unit:

Examiner:

Filed: March 22, 2004

For: Cryptographic Puzzle Cancellation

Service for Deterring Bulk Electronic

Mail Messages

Certificate of Mailing Under 37 CFR 1.10

I hereby certify that this INFORMATION DISCLOSURE STATEMENT and all accompanying documents are being deposited with the United States Postal Service "Express Mail Post Office To Addressee" Service under 37 CFR 1.10 on the date indicated below and is addressed to: Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450,

Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

In re Appln. of Andrew Birrell et al. Attorney Docket No. 225666

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Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.
after (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes <i>one</i> of:
the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).
after the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
after the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and within thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below). NOTE: This is for original applications except applications for a design patent, filed on or after May 29,
2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

In re Appln. of Andrew Birrell et al. Attorney Docket No. 225666

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Copie	s of the References				
	Copies of all of the	references listed on the	enclosed Form	1449 are en	closed herewith.
\boxtimes	and patent applicate herewith (see Offi	tion was filed after June tions that are listed on the cial Gazette Notice of a companying Form 1449	ne accompanyi August 5, 200	ng Form 144 3). Copies	49 are not enclosed of other references
	relevance pursuant English-language a by a foreign paten relevance found by	reference not in the English to 37 CFR 1.98(a)(3). abstract, or an English-last office in a counterpary the foreign office is be resuant to 37 CFR 1.98(a)	An English-land anguage version t foreign appliting submitted	nguage equiven of the sear cation indicates	valent/patent, or ar rch report or action ating the degree of
	A copy of the forei	gn search report is enclo	sed herewith.		
	application(s) of the that time. According as not to burden the requested to careful in the Manual of Federals of the parent	ed on the enclosed Form ne present application, a ngly, additional copies of e file with duplicate copi ally review the reference eatent Examining Procedure t application(s) relied up the references were prev	nd copies of the fithe reference es of reference is in accordance. In accordance on for an earlier	ne references is are not sub- is. The Exam- ie with the re- lance with 3 er filing date	s were furnished as mitted herewith, so niner is respectfully equirements set out 7 CFR 1.98(d), the under 35 USC 120
	U.S. APPLI	CATIONS	St	atus (check o	ne)
	S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.					
2.					
3.					
Stater	nent under 37 CFR	1.97(e)			
	Information Disclopatent office in a co	hereby states that easure Statement was firs ounterpart foreign patent information Disclosure S	t cited in any t application no	communicat	ion from a foreign
	Disclosure Stateme counterpart foreign	nereby states that no iter ent was cited in a common patent application, and e inquiry, no item of	nunication fro l, to the know	m a foreign ledge of the	patent office in a undersigned after

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Date: March 22, 2004

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Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

State	ment under 37 CFR 1.704(d)
	The undersigned hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
Fees	
	No fee is owed by the applicant(s). The IDS Fee of \$180 under 37 CFR 1.17(p) is enclosed herewith.
Meth	od of Payment of Fees
	Attached is a check in the amount of \$. Charge Deposit Account No. 12-1216 in the amount of \$. (A duplicate copy of this communication is enclosed for that purpose.)
Auth	orization to Charge Additional Fees
⊠ .	If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)
Instri	uctions as to Overpayment
\boxtimes	Credit Account No. 12-1216. Refund
	Vladan M. Vasiljevic, Reg. No. 45,177 LEYDIG, VOIT & MAYER, LTD. Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, IL 60601-6780 (312) 616-5600 (telephone) (312) 616-5700 (facsimile) Attorneys for Applicants

Please type a plus sign (+) inside this box ->	Ŧ

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Substitute for for	m 1449A/B/PTO			Application Number			
INEO	DMATION	אפור	N OSLIDE	Filing Date	March 22	2, 2004	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			First Named Inventor	Andrew	D. Birrell et al.		
SIA	IEMENIBA	AP	PLICANI	Group Art Unit			
	(Use as many sheets	s as ne	cessary)	Examiner Name			
Sheet	1	of	1	Attorney Docket Number	225666	(Client Ref. 307233.01)	

				U.S. PATENT DOCUMENTS		
		U.S. Patent Do	cument			
Examiner Initials	Doc. No.	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
	A 1	6,134,647		John D. Acton et al.	10/17/2000	
	A 2	2003/0233584		John R. Doucer	12/18/2003	
	A 3	10/291,260		M. Abadi et al.		11/08/2002
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		_		FORE	GN PATENT DOCUMENTS			
		Foreign Patent Document ·					Trans	lation
Examiner Initials	Doc. No.	Office	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Yes	No*+

		OTHER - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Tran: Yes	station No*+
	C1	Penny Black project home page http://research.microsoft.com/research/sv/PennyBlack/		
	C 2	M. Abadi, A. Birrell, M. Burrows, F. Dabek, and T. Wobber. "Bankable Postage for Network Services", to appear.		
	C3	M. Abadi, M. Burrows, M. Manasse, and T. Wobber. "Moderately Hard, Memory-bound Functions", <i>Proceedings of the 10th Annual Network and Distributed System Security Symposium</i> , February 2003.		
	C 4	A. Back, "HashCash A Denial of Service Counter-Measure" (5 years on), <i>Tech Report</i> , 2002.		
	C 5	C. Dwork, A. Goldberg, and M. Naor, "On Memory-Bound Functions for Fighting Spam", Proceedings of the 23rd Annual International Cryptology Conference (CRYPTO 2003), August 2003.		
	C6	C. Dwork and M. Naor, "Pricing via Processing or Combatting Junk Mail", Lecture Notes in Computer Science 740 (Proceedings of CRYPTO'92)}, 1993, pp. 137147.		
_	C7	Stoica et al. "Chord: A Scalable Peer-to-peer Lookup Service for Internet Applications". Proceedings of the 2001 conference on applications, technologies, architectures, and protocols for computer communications. 2001, pp. 149—160.		
	C 8	M. Abadi, A. Birrell, M. Burrows, F. Dabek, and T. Wobber, Bankable Postage for Network Services, <i>Proceedings of the 8th Asian Computing Science Conference</i> , Mumbai, India, December 2003.		
	C 9	L. von Ahn, M. Blum, and J. Langford, <i>Telling Humans and Computers Apart</i> , Communications of the ACM, Feb 2004, Vol. 47. No. 2.		

Examiner Signature	Date Considered

A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).
 An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).